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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,531	09/11/2001	Yvan Strauven	U.MINIERE-03	4239

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Mishrilal Jain
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EXAMINER

CREPEAU, JONATHAN

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,531

Applicant(s)

STRAUVEN ET AL.

Examiner

Jonathan S. Crepeau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The references cited in the Search Report issued by the EPO on 6/19/2000 have been considered, but will not be listed on any patent resulting from this application because they were not provided on a separate list in compliance with 37 CFR 1.98(a)(1). In order to have the references printed on such resulting patent, a separate listing, preferably on a PTO-1449 form, must be filed within the set period for reply to this Office action. Note that it is not necessary to re-list those references that are listed on the accompanying PTO-892, as these references have officially been made of record.

Claim Objections

2. Claims 5 and 10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 94/19502.

Regarding claim 5, the reference is directed to an alkaline battery comprising an anode, cathode, and electrolyte (see claim 23 of the reference). Regarding claim 1, the anode comprises a zinc alloy having a composition which anticipates each of the claimed compositions (a), (b), and (c). For example, the alloy disclosed at page 5, line 30, which contains 70 ppm (0.007 wt%) Al and 250 ppm (0.025 wt%) Bi, anticipates alloy (c) of instant claim 1. The alloy disclosed at page 6, line 12 (0.007 wt% Al, 0.025 wt% In) anticipates alloy (a) of instant claim 1. The alloy disclosed at page 6, line 21 (0.003 wt% Al, 0.025 wt% In, 0.025 wt% Bi) anticipates alloy (b) of instant claims 1 and 2. Regarding claim 6, the powder comprises metal cemented out of the electrolyte (see claim 24 of the reference). Regarding claim 1, the powder can be made by a centrifugal atomization process (see page 3, line 30). Although the reference does not teach the limitations in claims 1, 3, and 4 that the atomization is carried out in a protective atmosphere with a specified oxygen content, the patentability of a product does not depend on its method of production. If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Furthermore, once a rationale is provided tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See also MPEP §2113. Accordingly, the instant claims are not considered to be distinguished over WO '502.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 94/19502 in view of JP 1-52379.

Regarding claim 5, WO '502 is directed to an alkaline battery comprising an anode, cathode, and electrolyte (see claim 23 of the reference). Regarding claim 1, the anode comprises a zinc alloy having a composition which anticipates each of the claimed compositions (a), (b), and (c). For example, the alloy disclosed at page 5, line 30, which contains 70 ppm (0.007 wt%) Al and 250 ppm (0.025 wt%) Bi, anticipates alloy (c) of instant claim 1. The alloy disclosed at page 6, line 12 (0.007 wt% Al, 0.025 wt% In) anticipates alloy (a) of instant claim 1. The alloy disclosed at page 6, line 21 (0.003 wt% Al, 0.025 wt% In, 0.025 wt% Bi) anticipates alloy (b) of instant claims 1 and 2. Regarding claim 6, the powder comprises metal cemented out of the electrolyte (see claim 24 of the reference). Regarding claim 1, the powder can be made by a centrifugal atomization process (see page 3, line 30).

WO '502 does not expressly teach that the centrifugal atomization process is carried out in an atmosphere with a relatively low (i.e., <4vol%) oxygen content, as recited in claims 1, 3, 4, 7, 8, 9, and 10.

JP '379 is directed to a zinc alloy powder for an alkaline battery (see abstract). The powder is manufactured by atomizing the molten zinc alloy in a low oxygen concentration (<4vol%) atmosphere (see abstract).

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the disclosure of JP '379 would motivate the artisan to conduct the centrifugal atomization of WO '502 in an atmosphere containing less than 4 vol% oxygen. In the abstract, JP '379 teaches that the purpose of this atmosphere is "to retard hydrogen gas evolution in spite of a low mercury content." Accordingly, the artisan would be motivated to conduct the centrifugal atomization of WO '502 in an atmosphere containing less than 4 vol% oxygen.

Conclusion

7. The following notes are made with respect to the references cited in the International Search Report which bear an "X" label:

JP 1-52379 is not an anticipatory reference because its alloys contain nickel, which is excluded from the claimed alloys.

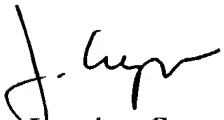
JP 61-64074 is not an anticipatory reference because its alloys contain tin, which is excluded from the claimed alloys.

JP 58-217608 is not an anticipatory reference because it broadly teaches a zinc alloy without disclosing a specific composition.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached at (571) 272-1302. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.



Jonathan Crepeau
Patent Examiner
Art Unit 1746
February 25, 2004